MINUTES of the

SECOND MEETING

of the

WATER AND NATURAL RESOURCES COMMITTEE

July 30-31, 2012 Pan Am Center, New Mexico State University Las Cruces

The second meeting of the Water and Natural Resources Committee was called to order by Representative Joseph Cervantes, chair, at 9:20 a.m. on Monday, July 30, 2012, in the Barbara Hubbard Room of the Pan Am Center at New Mexico State University (NMSU) in Las Cruces.

Present

Rep. Joseph Cervantes, Chair

Rep. Paul C. Bandy

Rep. Ray Begaye

Rep. Brian F. Egolf, Jr.

Sen. Mary Jane M. Garcia

Rep. Thomas A. Garcia (July 30)

Sen. Clinton D. Harden, Jr.

Rep. Dona G. Irwin (July 30)

Rep. Larry A. Larrañaga

Rep. Andy Nuñez

Sen. Gerald Ortiz y Pino

Sen. Mary Kay Papen

Sen. Sander Rue

Rep. Mimi Stewart

Rep. James R.J. Strickler

Rep. Don L. Tripp

Absent

Sen. Phil A. Griego, Vice Chair

Rep. William "Bill" J. Gray

Sen. George K. Munoz

Sen. Steven P. Neville

Advisory Members

Sen. Rod Adair (July 31)

Sen. Carlos R. Cisneros

Rep. Nora Espinoza

Rep. Candy Spence Ezzell

Rep. Rodolpho "Rudy" S. Martinez

Sen. Cisco McSorley (July 30)

Sen. Nancy Rodriguez

Sen. Peter Wirth

Sen. Vernon D. Asbill

Rep. Anna M. Crook

Sen. Dede Feldman

Sen. Timothy Z. Jennings

Rep. Ben Lujan

Rep. James Roger Madalena

Rep. Bill B. O'Neill

Sen. John C. Ryan

Rep. Henry Kiki Saavedra

Guest Legislators

Rep. Mary Helen Garcia (July 30) Rep. Rick Little (July 30)

(Attendance dates are noted for those members not present for the entire meeting.)

Staff

Jon Boller, Legislative Council Service (LCS) Jeret Fleetwood, LCS Alexandria Tapia, LCS

Guests

The guest list is in the original meeting file.

Handouts

Handouts and other written testimony can be found in the meeting file or on the legislature's web site.

Monday, July 30

Representative Cervantes began the meeting by having members of the committee and audience introduce themselves.

Welcome

Mike Cheney, NMSU Board of Regents, welcomed the committee to Las Cruces and NMSU. He provided the committee with some background information about the university and its impact on New Mexico's economy, which he pointed out involves a significant amount of money and a large number of jobs. Mr. Cheney also provided the committee with a short video highlighting some of NMSU's programs.

On a motion made, seconded and approved, the minutes of the June 26, 2012 meeting were approved as submitted.

Arizona Water Settlements Act

Craig Roepke, Interstate Stream Commission (ISC), began by providing the committee with a brief history of the Arizona Water Settlements Act of 2004 (AWSA). He also noted that the New Mexico Unit Fund was created by the legislature, explaining that the fund exists to receive federal money disbursed to New Mexico from the settlement. Mr. Roepke went on to note that the ISC held over 200 meetings involving stakeholder groups to seek input on potential AWSA projects. He also explained that proposals were evaluated and ranked.

Heather Balas, executive director of New Mexico First, provided the committee with testimony regarding a project contracted by the ISC involving New Mexico First convening and facilitating a series of town halls offering community members the opportunity to better

understand and offer feedback on the options associated with the AWSA. She summarized the town hall process, pointing out that the meetings were designed to be deliberative, and that several cross-cutting themes emerged from them. For example, Ms. Balas explained that proposals that met the needs of multiple communities seemed to be preferred over those that served only one or two counties, and that people did not seem to agree on the "New Mexico Unit" projects, or those projects that involved major diversions of the river. She also noted that water conservation projects, while meeting some disagreement about how helpful they really are, were generally well received, as were municipal infrastructure projects. Ms. Balas also pointed out that while watershed restoration projects were met with some degree of ambivalence, the town hall meetings were held well before the catastrophic wildfire in the Gila Wilderness, and that perceptions of those kinds of projects might have shifted.

Mr. Roepke explained that the applications submitted for AWSA projects have been narrowed to 16 projects, and that those 16 projects have been further divided into five categories: municipal conservation; effluent reuse and municipal infrastructure; diversion and storage; watershed restoration; and agricultural conservation and irrigation infrastructure. However, he noted that watershed restoration projects have been put on hold in the wake of the Whitewater-Baldy fire in the Gila Wilderness, mostly because the burn area is still inaccessible. Mr. Roepke went on to note that \$9.04 million had been disbursed to the New Mexico Unit Fund, and that the ISC had developed a work plan and budget for the use of some of that money for two full-time positions to work on further assessment of the 16 projects.

Questions and comments from the committee included:

- no state or local government matching funds are required by AWSA projects, and the ISC has no plans to ask for additional state funds;
- the ISC is required to make annual reports to the legislature regarding the AWSA, but the legislature does not have any control over the ISC with regard to the AWSA;
- the first \$66 million due to New Mexico from the settlement is indexed for inflation, making the total amount more than \$66 million;
- the time frame for project approval and implementation does not allow New Mexico much leeway;
- while New Mexico is not obligated to devote additional funds to AWSA projects, there could be additional costs to the state, as the eventual user of any additional water from an AWSA project would help pay for the project;
- the basics of the New Mexico Unit Fund;
- the City of Deming has withdrawn its proposal for a diversion project;
- decisions on projects will consider population but will not be entirely based on it;
- some agricultural projects may ultimately benefit residents of communities across New Mexico:
- the legislature may be able to weigh in on the decision-making process during the 2013 legislative session; and
- the AWSA does not specify whether project water can be exported elsewhere in New Mexico.

State and Regional Water Plans

Ms. Balas provided the committee with testimony regarding New Mexico First Centennial Town Hall, held on April 22-23, 2012. She explained that the town hall yielded a number of recommendations in various areas, some of which focused on water. Ms. Balas indicated that some of the water-related recommendations made by town hall participants were to update existing state and regional water plans to develop a comprehensive, long-range, statewide water strategy for New Mexico's surface and ground water and to do a better job of integrating those plans.

Michael Benson, board member of the New Mexico Water Dialogue, added that the state needs to continue giving resources to state and regional water plans. He explained that most water users want to know how they fit into the overall puzzle, and that understanding how pieces fit together and planning accordingly leads to better decision-making.

Eileen Dodds, San Augustin Water Coalition, echoed the comments of Ms. Balas and Mr. Benson. She explained that she supports the New Mexico Water Dialogue and any requests for more resources devoted to state and regional water planning.

Leslie Kryder, Elephant Butte Irrigation District (EBID), noted that EBID farmers have been receiving less than their full supply of water and emphasized that better planning would benefit all New Mexico water users. She also indicated that she supports permanent funding for water planning.

Scott Verhines, state engineer, explained that, as he is now a member of the Water Trust Board, he has a better understanding of the need to implement water planning. He explained that such efforts are important, because they influence how state money is spent in a number of ways.

Questions and comments by the committee included:

- the importance of funding state and regional water planning;
- the possibility of changing statutes regarding water planning;
- the evolution of regional water plans and how they fit into the state plan;
- that sometimes there is a disconnect between regional plans and the state plan; and
- the fiscal year 2013 water planning budget is still being worked out.

Water Resources Research Institute Current Projects (Regional Water Plans, Hydraulic Fracturing, Watershed Management)

Sam Fernald, director of the Water Resources Research Institute (WRRI), provided the committee with testimony regarding work performed at the institute. He began by providing the committee with a brief history of the WRRI, explaining that it was federally established but is attached to a land grant college, which is similar to institutes in other states. Dr. Fernald went on to explain that the WRRI's mission is to support research to address critical water problems, and he discussed some of the institute's research accomplishments, including salinity studies,

desalination research and aquifer assessments.

Dr. Fernald went on to discuss some of the WRRI's current projects, including:

- an aquifer sustainability study in the Mesilla Basin;
- research on acequia hydrology and aquifer interaction with rivers;
- watershed management research;
- hydraulic fracturing;
- brackish aquifer assessments; and
- statewide dynamic water budgets.

Dr. Fernald identified hydraulic fracturing, brackish aquifer assessments and dynamic water budgets as critical issues and new WRRI efforts. He also discussed some of the other current and ongoing WRRI research projects, such as a field project that will describe how contaminants are transported in karst aquifers. Dr. Fernald also mentioned some of the recent WRRI technical publications.

Questions and comments from the committee included:

- the lack of sufficient funding for some National Science Foundation projects and reliance upon federal money for some WRRI projects;
- how budget reductions almost forced the WRRI to shut down, but that NMSU has since designated the institute as one of its priorities, which should improve its funding outlook;
- the possibility of using AWSA funds to map Gila area aquifers;
- capital outlay funding cannot be used to fund the WRRI's base budget;
- how isotopes are used to trace Pecos aquifer characteristics, such as water age and flow pattern; and
- that federal agencies often do not completely understand what kind of contaminants they place in water.

Federal Claims on State Ground Water Resources

Frank Reckard, Office of the State Engineer (OSE), provided the committee with testimony regarding a series of federal claims on ground water that challenge the primacy of the state's jurisdiction over its ground water. He gave four examples where various federal agencies are pursuing claims that will undermine New Mexico's jurisdiction over its ground water:

- in a case involving a settlement with Molycorp over a federal Superfund site, the New Mexico Department of Agriculture is making an unprecedented claim on a portion of the damages awarded to the state based on a claim of federal ownership of ground water;
- the new biological opinion issued on the middle Rio Grande involving the Rio Grande silvery minnow focuses on ground water;
- federal claims in cases involving Native American tribes and pueblos that involve ground water; and
- an adjudications case involving the lower Rio Grande Water Project in which it is

asserted that ground water is part of project water.

Michael Van Zandt, Hanson Bridgett LLP, provided the committee with testimony regarding livestock owners and their rights to stock water on federal lands. He provided the committee with the following suggestions for legislation that might clarify the issue and help livestock owners secure water rights for stock tank water:

- provide statutory recognition for stock water rights as beneficial use;
- recognize pre-1907 stock water rights and provide a mechanism for furnishing proof of such rights to the OSE;
- recognize the confirmation of stock water rights on federal land based on custom and practice per the federal Mining Act of 1866;
- clarify whether constructed works are necessary to prove pre-1907 stock water rights;
- clarify if there is a forage or grazing right appurtenant to a New Mexico water right;
- clarify whether there is a right of access to water rights on federal land; and
- clarify whether ditch rights of way established under the Mining Act of 1866 on federal lands are subject to the definition of scope and the extent of easements exclusively under New Mexico law.

Mr. Van Zandt explained that livestock owners do own a water right on stock tanks on federal land. However, he noted that federal agencies are trying to assert rights on the same water, claiming the water instead for livestock or recreational use.

Jay Stein, an attorney with Stein and Brockman, P.A., also discussed the issue of federal claims on state ground water resources. He explained that his law firm represents both the City of Las Cruces and the City of Española in adjudications where federal claims to ground water are at issue.

Mr. Stein began by saying that the City of Las Cruces planned for future growth and water use by supplementing its ground water supply with more renewable surface water through an agreement with the EBID that transfers agricultural water to municipal use. However, he indicated that the operating agreement among the EBID, El Paso Number 1 and the federal Bureau of Reclamation (BOR) has created some serious questions about the availability of surface water to the city and the sustainability of existing ground water resources upon which the city relies for its drinking water. Mr. Stein explained that the operating agreement has created additional stress on the city's water supply by encouraging area irrigators to drill wells to regain surface water lost to El Paso Number 1. He also noted that the exact effects of the operating agreement are still not clear, and that the City of Las Cruces has been granted intervenor status in a lawsuit brought by the attorney general in order to obtain a complete environmental impact statement. Mr. Stein noted that the BOR's claim that ground water is part of project water ignores the impact this will have on other ground water users in the basin and represents a practical obstacle to the city's ability to provide a long-term and sustainable supply of water.

Mr. Stein went on to discuss the City of Española's involvement in the stream system

adjudication in northern New Mexico, *State Engineer v. Abbott*, in which the United States has made claims totaling 6,000 acre-feet of surface water on behalf of Ohkay Owingeh. However, Mr. Stein explained that the United States' complaint also makes the assertion that when surface water is not available, it has the right to drill wells into the aquifer upon which Española depends for most of its water needs without going through the state engineer's permitting process. Moreover, he noted, there is concern that unrestricted pumping by the United States or Ohkay Owingeh could induce encroachment of contaminants into the city's wells.

Steve Hernandez, attorney for the EBID, explained that the lower Rio Grande stream adjudication has progressed to the point that the next question that must be answered is the source or sources of water for the Rio Grande Project. However, he noted that the position of state and local governments and that of the federal government are at opposite extremes, with the state holding that the federal government cannot own any ground water that is part of the Rio Grande Project, while the federal government claims it owns all hydrologically related ground water. Mr. Hernandez went on to explain that the EBID's position is that both sides miss the point in that ground water is hydrologically related to surface water, and that getting into a battle over ownership of the water before a more complete understanding of just how much water is available is a waste of time and money. Mr. Hernandez also summed up another case involving ownership of water rights on a reclamation project in the Pecos adjudication for the Carlsbad Reclamation Project, noting that Judge Byrd ruled that neither the United States nor the irrigation district owned ground water rights, but each owned an interest in the water. As such, he said, those interests could be recognized by the state in an adjudication.

Mr. Verhines noted that he serves on the Western States Water Council, which helps to inform 18 governors of western states on water issues. He explained that the council has recently identified state ownership and control of water rights as its number one issue, and that unprecedented federal claims to ground water are damaging the working relationship between the western states and federal agencies.

Questions and comments from the committee included:

- the parties will argue before the court on August 1 on this issue;
- the amount of water contained in area aquifers is still unknown, although much work has been performed to map the aquifers;
- the previous state engineer, John D'Antonio, addressed the stock water issue in the case of U.S. Forest Service claims by signing stock water licenses before he left;
- the City of Española has been aware of a contamination issue in its water for some time:
- federal courts are looking at the issue of ownership of ground water;
- the EBID's position is not the same as the federal government's position;
- these cases have broader statewide implications;
- the role of the legislature in these issues; and
- that the OSE said it would prefer to solve issues on technical merits, rather than through litigation.

Dam Safety and Proposed Changes to the Watershed District Act

Debbie Hughes, New Mexico Association of Soil and Water Conservation Districts, explained that several dams sponsored or owned by soil and water conservation districts (SWCD) are in need of maintenance or upgrades. However, Ms. Hughes noted that current law allows owners of land to petition SWCD boards to have their land removed from the watershed district, which triggers a hearing process that many districts cannot afford. In addition, she explained, if landowners are allowed to withdraw from watershed districts, there will be no ability to levy taxes for maintenance and operation of watershed dams.

Ms. Hughes noted that current law also allows for 25 landowners to petition to request that the existence of the watershed district be discontinued. She explained that even if the watershed district ceases to exist, dams built to protect life and property will still be there and require maintenance. Ms. Hughes suggested that this issue can be solved by simply repealing Sections 73-20-22 and 73-20-23 NMSA 1978, the sections of the Watershed District Act that address detaching land from districts and discontinuance of districts.

Mr, Verhines noted that the OSE Dam Safety Bureau chief is retiring and that a replacement is being sought. He also noted that risk of failure and hazard classifications for dams are constantly changing. Currently, he said, 10 out of 300 dams statewide are the responsibility of the state.

Questions and comments by the committee included:

- plans do not currently exist to build additional dams;
- many current dams are still valuable but need to be improved to be considered safe;
- earthen dam maintenance includes pest control and brush control;
- whether a mechanism exists for detaching land from the Albuquerque Metropolitan Arroyo Flood Control Authority;
- watershed districts can tax up to a five-mill levy;
- taxes collected by watershed districts are used to conduct maintenance and to match federal dollars for larger projects;
- SWCDs can also tax, up to a one-mill levy;
- that no one knows who built many of the small dams across the state, and a lack of data about their construction often causes a dam to be listed as in poor condition; and
- jurisdictional versus vested interests in dams and dam safety.

Drought and Climate Update

Dave Dubois, New Mexico state climatologist, briefed the committee on drought conditions in the state and climate conditions in general. He began by explaining that the first six months of 2012 were among the driest on record, with June 2012 being the seventh-driest month ever recorded for the state. Dr. Dubois went on to note that the temperature rankings for 2012 were also above average, with the past 12 and 24 months being the warmest on record. He indicated that while almost 24 percent of the state is currently classified as being in extreme

drought, it shows improvement over this time last year, when 79 percent of the state was in extreme drought, pointing out that precipitation totals have improved somewhat for most of the state. Dr. Dubois then noted that the precipitation outlook for the next several months is improved for the western half of the state, and that central Pacific Ocean surface temperatures are showing likely development of an El Niño weather pattern later this year.

Dr. Dubois discussed the NMSU climatology program, pointing out that 47 states currently have state climatologists. He explained that the climatology program was created in 1979 within the New Mexico Department of Agriculture, but was transferred to the Agricultural Experiment Station at NMSU in 1997. Dr. Dubois also noted that the NMSU Board of Regents appoints the state climatologist, but that the program is not permanently funded. Dr. Dubois said that the position's duties include:

- assessing climate effects on the natural environment;
- coordinating programs to improve understanding of climate processes;
- developing methods for state agencies and schools to participate in the program;
- disseminating climate data; and
- consulting and coordinating with the federal government and other states.

Dr. Dubois also discussed some of the other specific duties of his position, such as serving as the director of the New Mexico Climate Center and as state coordinator for the Community Collaborative Rain, Hail and Snow Network (CoCoRaHS), which enlists residents to help monitor precipitation data across the state.

Questions and comments by the committee included:

- budget needs for the program are about \$150,000 per year;
- the program is not currently identified as one of NMSU's funding priorities;
- El Niño and La Niña weather patterns are cued by Pacific Ocean temperatures, with cool ocean temperatures causing La Niña, which features warmer and drier weather, and warmer ocean temperatures translating to cooler and wetter patterns;
- climate change seems to have differing effects by region on El Niño and La Niña patterns; and
- CoCoRaHS participation is about 300 individuals in New Mexico.

The committee recessed at 5:25 p.m.

Tuesday, July 31

New Mexico Extension Services and Experiment Station

Several representatives of various county extension programs provided the committee with testimony regarding the various projects and services currently under way or available.

Bruce Hinrichs, associate director of the Cooperative Extension Service, NMSU, began by explaining that cooperative extension services are available to help residents in all 33 New

Mexico counties. He also pointed out that NMSU's agriculture experiment stations conduct research that can be converted into useable data.

Tracy Drummond, Catron County extension agent, discussed the catastrophic wildfires that occurred in southwestern New Mexico. He explained that two such fires had occurred in the region over the past two years: the Wallow fire in 2011 and the Whitewater-Baldy fire in 2012. Mr. Drummond said that his office acts as a liaison between U.S. Forest Service firefighters and other groups involved in the fire response to facilitate the movement of people and pets and to direct those people to designated evacuee areas. He pointed out that one hurdle in the coordination of resources is the Constitution of New Mexico's anti-donation clause, which prohibits the purchase of resources such as hay to feed animals that have been evacuated to shelters during events like large wildfires. However, he did note that in such situations, he remains in daily contact with state government officials who can deploy resources through the Cooperative Extension Service.

Sam Smallidge, Range Improvement Task Force, discussed the damage caused by recent catastrophic wildfires to local ecosystems. He explained that the loss of land, life and property during the Cerro Grande fire led NMSU to begin fire research and education, particularly with regard to how fires behave in thinned and treated areas of forest and untreated areas. He explained that researchers had visited all of the national forests in New Mexico and Arizona for data and concluded that active forest management tends to reduce the damage caused by catastrophic wildfires. As a result, Mr. Smallidge indicated that a fire extension program has been developed for resource managers, which is being disseminated at conferences, demonstrations and one-on-one meetings.

Larry Dominguez, division director for the New Mexico Department of Agriculture, also discussed research conducted on wildfires. He explained that while comparisons offered somewhat anecdotal evidence, data suggested that when surface and aerial fuel loads were diminished, fire severity tended to diminish. Mr. Dominguez went on to note that data seemed to indicate that treatment by mechanical thinning followed by prescribed fires showed the greatest impact toward mitigating fire severity.

Mr. Hinrichs also provided the committee with an update regarding the budget for programs associated with NMSU College of Agriculture programs. He explained that state funding had been reduced by 21.8 percent, causing some organizations to downsize. Mr. Hinrichs indicated that while some funding may be restored, continued state support would be necessary in order to avoid changes to the structure of available programs.

Questions and comments from the committee included:

- techniques that seem to work, and others that do not, in keeping forests healthy and mitigating wildfire damage;
- the disappearance of timber harvesting mills in small New Mexican communities, which seemed to encourage forest thinning;

- potential development of local forest product industries;
- whether the U.S. Forest Service allowed some fires to burn too long, allowing them to grow out-of-control and destroy significant amounts of private property;
- the responsibility of local governments to manage nearby forests before fires become catastrophic;
- restrictions on dealing with fires deep in wilderness areas, where deploying resources is costly and potentially dangerous;
- the use of fire by many agencies as a forest management tool;
- the tendency of fires to cycle between low and high intensity over the course of two to three years;
- problems faced over environmental regulations as a hurdle to developing small mills to help thin forests;
- livestock issues associated with land and fire management;
- that federal lands account for about 35 percent of the land in New Mexico; and
- the process for fire management sometimes depends on ownership of the land.

Cattle Growers' Concerns About Railroad Fencing

Caren Cowan, executive director of the New Mexico Cattle Growers' Association, expressed the concerns of livestock owners over fencing issues with railroads and the responsibility of railroad operators to repair certain fences. Ms. Cowan explained that state statute identifies railroad companies as the responsible party for erecting and maintaining fences along the paths of railroad tracks. However, Ms. Cowan noted that the law is not being enforced and does not carry any penalties. She also said that numerous landowners have encountered reluctance or refusal by railroad companies to erect or adequately maintain such fences, resulting in collisions between livestock and trains that result in significant losses for livestock owners. Ms. Cowan provided the committee with pictures of collisions between trains and livestock. She also provided examples of communication between livestock owners and Burlington Northern Santa Fe Railway (BNSF) that she said showed that the railroad seemed unconcerned with legitimate complaints.

Several other landowners provided similar testimony and provided the committee with copies of emails exchanged between themselves and BNSF representatives.

Roberto Munguia, BNSF, explained to the committee that the BNSF has been working diligently to address the concerns of some of the landowners identified earlier. He acknowledged that while the company's first priority is maintenance of the railroad track itself, it could do a better job of erecting and maintaining fences. He explained that communication remains open between the BNSF and parties filing claims regarding loss of livestock and railroad fencing. Mr. Munguia also emphasized that the BNSF is working to address all of the identified fencing issues.

Questions and comments from the committee included:

• that the BNSF and the other railroads operating in New Mexico need to follow the law

- regarding fencing;
- the possibility of the committee endorsing a bill that carries penalties for railroads not erecting or maintaining fences;
- that livestock owners feel that settlements with the railroads often do not provide fair compensation for losses;
- in the event of a collision, livestock is inspected to tie it to landowners;
- railroads will compensate tribal landowners for losses, too;
- the BNSF has told some claimants that they are in the railroad business, not the fence business:
- the possibility of landowners repairing fences and taking the railroad to court for the costs; and
- the BNSF worked to repair fences and install gates on a ranch in the Gallup area, but fences are repeatedly cut by people using the area for parties.

Weather Modification and Drought Relief

George Bomar, meteorologist and weather modification program specialist, provided the committee with testimony regarding weather modification efforts in eastern New Mexico. He explained that a partnership between eastern New Mexico and western Texas had sponsored a five-year cloud seeding project, beginning in 1997, that yielded promising results. Mr. Bomar went on to explain that more recent efforts, both in New Mexico and in neighboring states, had yielded even more encouraging results. However, he pointed out that cloud seeding is not effective drought relief, particularly because there tend to be fewer clouds during droughts.

Questions and comments by the committee included:

- that silver iodide is used to seed clouds, and it only minimally raises the silver levels in soil;
- downwind areas of seeded clouds show positive results for about 100 miles;
- weather patterns in New Mexico tend to flow from the southwest to the northeast, while Texas relies more on Gulf of Mexico moisture;
- that New Mexico did not match funds for a recent cloud seeding project in conjunction with a group from Plains, Texas; and
- technological advances have made predicting which clouds to seed much more reliable.

There being no further business, the committee adjourned at 12:25 p.m.